

Date: Friday, 24/10/2008 3:29:45 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BEARPAW KIT (19"X24")
Job Number : 42938	
Estimate Number : 10323	
P.O. Number :	Part Number : D206559013
This Issue : 24/10/2008 S.O. No. :	Drawing Number : D2432 REV F3
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : F3
Previous Run : 42036	Material :
Written By :	Due Date : 15/10/2008 Qty: 65 Um: Each
Checked & Approved By : <u>Julie Dawson 24-10-08</u>	
Comment :	
Est Rev:J 04.02.17 Blank size changed KJ/JLM	
Est Rev:K 07-01-02 Was K10008 JLM	
Est Rev:L 08-01-09 Added Step 2 JLM Verified	
By:EC	
Est Rev:M 08-04-29 update seq. 8 and 12 DD verified by:EC	
Est Rev:N 08-10-15 New Manufacturing Method JLM	
Verified By:EC	

Additional Product

Job Number:



Seq. #: **Machine Or Operation:** **Description :**

1.0 DC DOCUMENT CONTROL



for JLD 08/11/10



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-559-013 CHG005

5096112

2.0 MFG ENGINEERING MFG ENGINEERING



Comment: MFG ENGINEERING

Program Batch Number

for 08.11.27

3.0 MUHMWB10 UHMW 1" Black



Comment: Qty.: 3.4083 sf(s)/Unit Total: 17.0415 sf(s)

Material: Black UHMW 1"

(MUHMWB10)

Batch: *109186 LB 8-12-3*



4.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET

Cut Blank as per D2432 File

LB 8-12-3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 24/10/2008 3:29:45 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (19"X24")

Job Number: 42938

Part Number: D206559013

Job Number:



Seq. #: Machine Or Operation: Description :

5.0

HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

Note: (2) bearpaws for (1) Kit

(12)

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio and Dwg D2432 Identify as D2432F

3-Deburr

H.A 09/01/08

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



(12)

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

H.A 09/01/08

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

09.01.08 (12)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

9.0

D2182B

Rubber Cushion



Comment: Qty.: 2.6000 f(s)/Unit Total : 13.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 D2182B050 Rubber Cushion

42737

09/01/08 (12) X6

10.0

D2274

Radius Block



Comment: Qty.: 12.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 D2274 Radius Block

2 D2432F(ref only) Bearpaw

42099

09/01/08 (12) X6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 24/10/2008 3:29:45 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (19"X24")

Job Number: 42938

Part Number: D206559013

Job Number:



Seq. #: Machine Or Operation: Description :

11.0

D2438

Clamp



Comment: Qty.: 6.0000 Each(s)/Unit Total: 30.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch
6 D2438 Clamp ~~B42099~~ B41428

12.0

D2529

Washer



Comment: Qty.: 12.0000 Each(s)/Unit Total: 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch
12 D2529 Washer 42408

13.0

D2732

Rubber Extrusion



Comment: Qty.: 2.6000 f(s)/Unit Total: 13.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch
6 D2732-050 Rubber Cushion 38509

14.0

AN415A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total: 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch
12 AN4-15A Bolt M109148

15.0

AN417A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total: 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch
12 AN4-17A Bolt M109061

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 24/10/2008 3:29:45 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARPAW KIT (19"X24")

Job Number: 42938

Part Number: D206559013

Job Number:



Seq. #:

Machine Or Operation:

Description:

16.0

AN960JD416

Washer



Comment: Qty.: 24.0000 Each(s)/Unit Total: 120.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

24 AN960JD416 Washer

M109249

SS 09/01/12 (x6)

17.0

MS21042L4

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total: 60.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

12 MS21042L4 Nut (or -4)

M108145

comp unit
take qty's

SS 09/01/12 (x6)

18.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S 09/01/12 (x6)

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPPD206-559-013

Location: _____

Rev A 9/1/12

(6x) SD

20.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/01/13

Job Completion



MF 09-01-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 42938
Description: Bearpaw		Part Number: D2432
Inspection Dwg: D2432	Rev: F3	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.063 x 45°	+0.030/-0.010	0.063	✓			
B	5.500	+/-0.030	5.501	✓			
C	0.200	+/-0.030	0.203	✓			
D	0.25 x 45°	+/-0.030	0.250x45°	✓			
E	R0.250	+/-0.030	R0.250	✓			
F	0.250	+/-0.010	0.252	✓			
G	0.625	+/-0.030	0.627	✓			
H	0.375	+/-0.010	0.380	✓			
I	0.950	+0.030/0.010	0.955	✓			
J	19.000	+/-0.030	19.000	✓			
K	3.14	+/-0.030	3.128	✓			
L	3.28	+/-0.030	3.300	✓			
M	Ø0.260	+0.005/-0.000	Ø0.260	✓			
N	Ø0.93	+/-0.030	Ø 0.927	✓			
O	0.30	+0.030/-0.000	0.305	✓			
P	23.750	+/-0.030	23.750	✓			
Q	7.375	+/-0.030	7.370	✓			
R	4.250	+/-0.010	4.252	✓			
S	2.000	+/-0.030	1.980	✓			
T	9.000	+/-0.010	8.996	✓			
U	9.000	+/-0.010	8.997	✓			
V	0.375	+/-0.010	0.375	✓			

Measured by: M.A	Audited by: [Signature]	Prototype Approval: N/A
Date: 09/01/08	Date: 09-01-09	Date:

Rev	Date	Change	Revised by	Approved
A	04.01.09	New Issue	P/O K10008/D206-559-015	KJ/RF [Signature]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

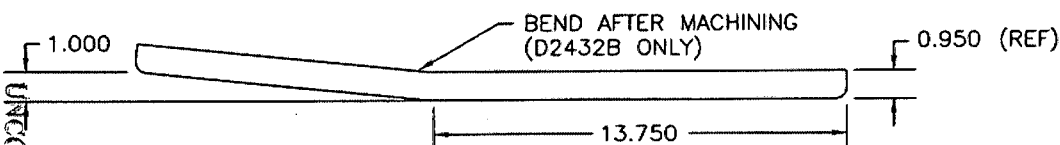
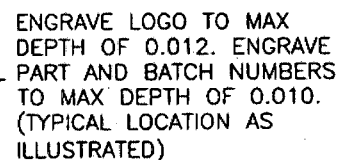
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

RELEASED
43-06-17 K8



EFFECTIVE	DEOS
9143	



D2432F: FLAT BEARPAW
D24328: BENT BEARPAW

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)

Copyright 1995 by DART AEROSPACE LTD

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
NO. W180028
480955

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

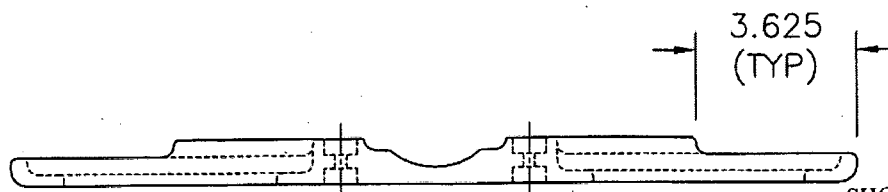
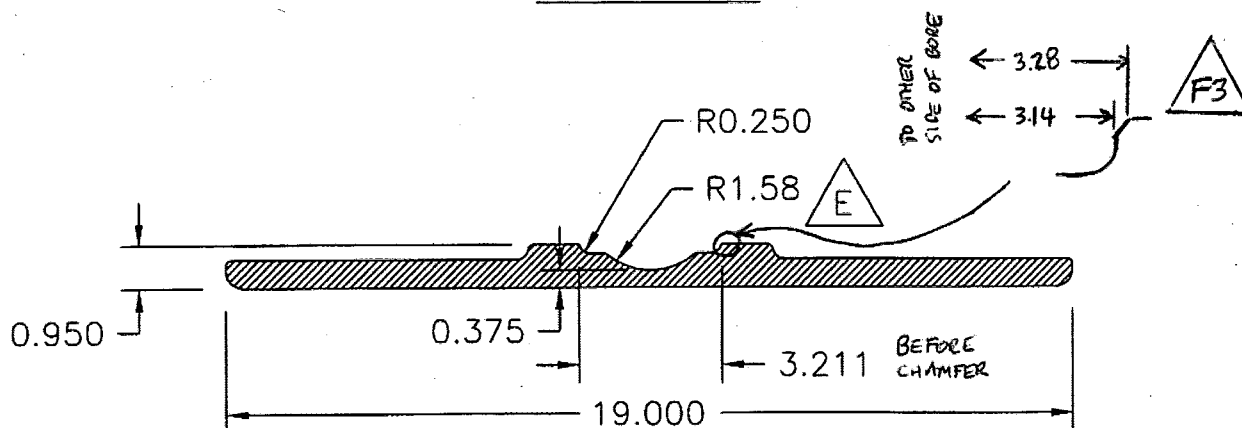
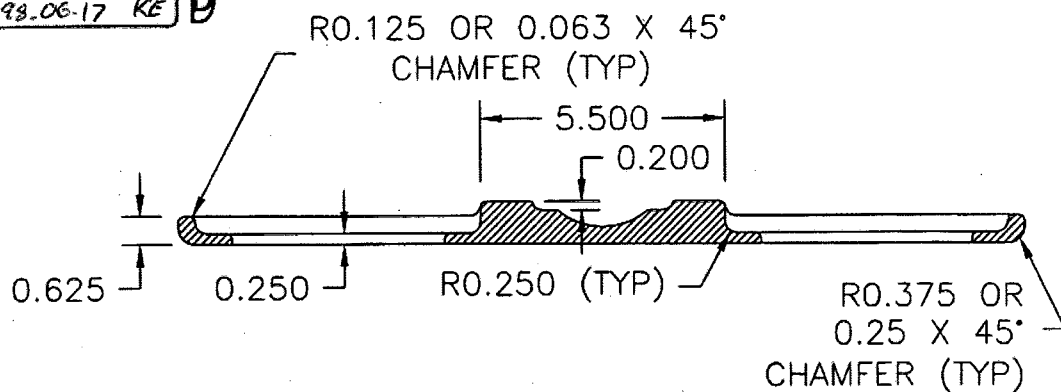
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN KE	DRAWN BY KE	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2432	REV. F SHEET 2 OF 2
DATE 98.05.12	TITLE BEARPAW		SCALE 1:4

RELEASED
98.06.17 KE



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 42938

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries